

The second element of claim 1 recites “elements structured in combination to automatically vary the opening size in response to ...” This is a separate use of a form of the word automatic from the use in the preamble. As per the preamble (and as per the structure recited in the first claim elements of the independent claims,) the nozzle is “automatic” in the industry-recognized sense of being “pressure regulating.” In addition, the nozzle automatically self-meters as per the second claim element (of claims 1-4, for instance.) Applicant submits that such recitation is not per se indefinite.

Applicant has amended claims 10-12 to delete the limitation “(pressure regulating, at least in part)” and to recite instead “at least partially automatic.” Applicant submits that the amended claim language is not subject to being understood as “a broad range within a narrow range.”

§102(e) Rejection Over the ‘187 Patent

In regard to paragraphs 3-4 of the Office Action, and the §102(e) rejection over a related patent, applicant respectfully submits, first, that claims 5 – 8 and 13, and the claims that depend thereon, are not properly rejected as anticipated by the ‘187. The Examiner does not find in the ‘187 reference, and applicant submits correctly so, limitations relating to a “ratio selector.” See the instant Figures 4, 7, 8 and 9 and associated text in the specification in regard to the “ratio selector” disclosure. Those figures, text and disclosure are not in the reference ‘187.

In regard to independent claims 1 – 4 and 10 – 12, and the claims that depend thereon, please see the attached affidavit. The limitations of claims 1-4, 10-12, and those that depend thereon, were disclosed by the instant inventor in the parent application, now US Patent No. 6,749,027, of which this application is a continuation-in-part. (For instance, see the ‘027 Figures 3A and 3D and text discussing same.) (The § 102(e) reference, the ‘187, is also derived from, and also relates back to, the ‘027 parent.) The instant inventor is the same inventor as that of the parent. To the extent that the invention of claims 1-4 and 10-12, as found in the parent, is disclosed in the ‘187 reference, that disclosure was derived from the parent and the inventor of the instant application. It is not the invention by “another.” An attached affidavit so declares.

§103 Rejection Over Lindsay in View of Steingass

Claim 1 can be taken as exemplary of the independent claims. Claim 1 recites:

a ... **nozzle comprising:**
an **additive passageway** in fluid communication with
a **fire fighting liquid conduit of the nozzle**
the conduit having a **discharge orifice** that varies in size with supply pressure
and **structural elements ... structured in combination automatically vary in response to variations in ... the discharge orifice.**

Claim 1 recites “a nozzle comprising.” The Examiner has not found or asserted in Lindsay a nozzle that includes an “additive passageway” and “structural elements,” as above claimed. The Examiner has cited a “proportioner,” as disclosed by Lindsay, with these features. The Examiner provides neither evidence, argument nor factual basis as to how, or where, one is to incorporate the recited (proportioner) elements of the claims into “a nozzle.” Applicant submits that such is not obvious and would involve significant restructuring of Lindsay’s “proportioner,” were it possible.

As to the asserted motivation, there is no motivation provided for building Lindsay’s proportioner into Steingass’s nozzle, as such would not serve “to provide a way to maintain constant pressure for a fire fighting nozzle.” Applicant submits that the mere assertion that “it would be obvious to provide Lindsay’s proportioner with a third party nozzle in order to maintain a constant pressure for a fire fighting nozzle” comprises insufficient basis for making the requisite combination and fails to make a prima facie case. Factual basis and evidence as to the structure of the resultant combination and/or as to the motivation to make the required combination is lacking.

(Steingass discloses a fire fighting liquid conduit with a discharge orifice that varies in size with supply pressure. Steingass does not remedy the above deficiency. Steingass neither teaches nor suggests self-metering or the “additive passageway” or the “structural elements.”)

The Examiner asserts that “it would have been obvious to one having ordinary skill in the art to **have provided** the device of Lindsay with a fire fighting nozzle that has a variable discharge orifice suggested by Steingass” (emphasis supplied.) If one assumes that the Examiner means that it would have been obvious to replace Lindsay’s nozzle 85 with Steingass’s nozzle, then applicant submits that exemplary claim 1 does not “read on” such combination. (Note: the same is true of claims 2-4 and 10-12.)

(1) Lindsay’s elements are not part of a nozzle, as discussed above [i.e. not “a nozzle comprising.”] (2) Lindsay’s “structural elements” 33/35/ 37/41/19 do not automatically vary in response to variations in size of “**the**,” i.e. Steingass’s nozzle’s, discharge orifice. Neither Lindsay’s element 17/23 nor Steingass’s element 98 is “**the**” discharge orifice of claim 1, because neither is both the discharge orifice “of a fire fighting liquid conduit of the nozzle,” as recited by claim 1, as well as the discharge orifice in response to which the “structural elements” 33/35/37/41/19 automatically vary. Thus to summarize, on the one hand Lindsay’s discharge orifice 17/23 is not the discharge orifice of a fire fighting liquid conduit of a nozzle. On the other hand, Lindsay’s structural elements 33/35/39/41/19 do not define a variable opening that automatically varies in response to variations in the size of Steingass’s discharge orifice 98. The claims do not “read on” the structure resulting from replacing Lindsay’s nozzle 85 with Steingass’s nozzle.

The arguments above in regard to exemplary claim 1 apply also to independent claims 2-4 and 10-12, as well as to the claims that depend thereon.

Furthermore, the Examiner has not located the limitation of the "ratio selector" having at least two settings in any of the references. Hence, claims 5-8, 13 and those that depend thereon are patentable for that reason alone.

Reconsideration and further examination is respectfully requested.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Sue Z. Shaper, Applicants' Attorney at 713 550 5710 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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Date



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